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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,919	11/10/2005	Yutaka Inoue	1907-0222PUS1	3787

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EXAMINER	
SHALLENBERGER, JULIE A	

ART UNIT	PAPER NUMBER
2885	

NOTIFICATION DATE	DELIVERY MODE
05/02/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/531,919	INOUE ET AL.	
	Examiner	Art Unit	
	JULIE A. SHALLENBERGER	2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8-10,29-31 and 33-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8-10,29-31 and 33-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The amendment filed has been entered.

C/laim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which /forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shoenfeld (6,364,505).

Shonefeld teaches a backlight unit for illuminating an object using a plurality of fluorescent lamp light sources 22 (figures 3 and 4) disposed below the object to be illuminated (x-ray), wherein the unit has a reflection potion (figure 5) for causing the light form the light sources to exit toward a certain direction, wherein the reflection portion comprises first and second reflection layers (23 and 27) with predetermined levels of reflectance and transmittance wherein the reflection portion consists of a first region with first and second reflection layers (whole bottom 23 and 27) located at a position equivalent to the central portion on the surface to be illuminated and a second region containing the first reflection area only (23 alone – minus area 27), wherein a brightness gradient is formed in the horizontal and vertical directions on the surface to be illuminated and wherein the reflectance is controlled using the first region with relatively higher reflectance than the second region, but does not explicitly teach that the first and second layers are overlapped in the first region (col. 4 line 6-col. 5 line 27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make layer 27 overlap layer 23 (via adhesive or the like) in order to simplify the manufacturing process.

Claims 9, 10, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoenfeld in view of Shaw (6,494,587).

In regard to claims 9 and 10, Shoenfeld teaches the invention described above, including first and second layers located in the central portion of the horizontal (as recited in claim 9) and vertical (as recited in claim 10) direction, but lacks the teaching of making the brightness of the light sources located at the central portion in the vertical direction on the surface to be illuminated relatively higher than the brightness of the light sources located at both ends(col. 4 line 6-col. 5 line 27).

Shaw teaches a backlight with fluorescent light sources which is capable of adjusting the brightness of the light sources located at the center so that the central portion is illuminated relatively higher than both ends (col 1 lines 36-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Shaw's teaches of controlling the luminance output of lamps in a backlight in order to make the central region brighter to better illuminate objects that are positioned in the center (ie x-rays).

In regard to claims 33 and 34, Shaw teaches using a backlight with a liquid crystal display (col. 1 line 14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the backlight of Shoenfeld in a liquid crystal display in order to increase the marketability of the backlight device.

Claims 29, 30, 31, 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shoenfeld in view of Ogiwara (2003/0210222).

Shoenfeld teaches the invention described above as well as the backlight unit controlling reflectance of the reflection portion in a direction parallel with the longitudinal direction of the lamps (as recited in claim 37) wherein the lamps are parallel to the horizontal direction of the object to be illuminated (as recited in claim 38), but lacks the teaching of making the clearance of light sources located at the center (in horiz./vert. directions) on the surface to be illuminated relatively smaller than the clearance of the light sources located at both ends or a liquid crystal display(col. 4 line 6-col. 5 line 27).

Ogiwara teaches making the clearance of light sources located at the center (in horiz./vert. directions – as recited in claims 29 and 30) on the surface to be illuminated relatively smaller (see figure 7) than the clearance of the light sources located at both ends [0281]-[0285].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to makes the clearance between the light sources smaller at the central area as taught by Ogiwara in order to increase the luminance (brightness) in the central portion so objects are better illuminated in the main area of the device.

In regard to claims 31, 35, and 36, Shoenfeld lacks a liquid crystal panel as the backlight panel. Ogiwara teaches using a backlight in a liquid crystal display [0019].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the backlight of Shoenfeld in a liquid crystal display of Ogiwara in order to increase the marketability of the backlight device.

Response to Arguments

Applicant's arguments filed 2/12/08 have been fully considered but they are not persuasive.

In regard to the applicant's argument that it would not have been obvious to over lap the reflective layers of Shoenfeld, the reflective region 23 is a flat reflector, and reflective pattern 27 is coated (col. 5 lines 4-8) on the reflector 23, therefore layer 27 overlaps reflective region 23.

Shoenfeld also teaches that a conventional backlight unit has a brightness gradient (figure 1, col. 4 lines 6-24). Therefore, the criticality of the applicant's invention is merely drawn to a conventional backlight system.

In response to applicant's arguments that Shoenfeld does not disclose specifically the application of forming a brightness gradient, the applicant is respectfully advised it has been held by the courts that the use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain. *In re Heck*, 216 USPQ 1038 and *In re Lemelson*, 158 USPQ 275. In this case,

brightness gradients are conventional in backlight systems and while Shoenfeld teaches compensating for the brightness gradient, one of ordinary skill in the art would recognize that if desired, a brightness gradient could be formed by adjusting the reflectivity of the layers 27 and 28.

In response to the applicant's argument that Shoenfield fails to disclose first and second layers being overlapped at a position equivalent to the central portion, figure 5 shows layers 27 overlapping layer 23 in the central portion.

In response to the applicant's arguments regarding Shoenfeld modified by Shaw not teaching the brightness of the light sources located at the position equivalent to the central portion illuminated higher than the light sources at both ends, this is a functional limitation and the structure of Shoenfeld modified by Shaw is capable of performing the recited functional application of the backlight device. Furthermore, Shoenfeld teaches that conventional backlights are brighter in the central area (figure 1, col. 4 lines 6-24), and one of ordinary skill in the art at the time the invention was made would have recognized that light sources of Shaw could be adjusted to illuminate brighter in the central area.

In response to the applicant's arguments regarding the motivation to combine Shoenfeld modified by Ogiwara to make a backlight with a brighter illumination area in the center, while Shoefeld teaches using reflective layers for uniform illumination, Shoenfled also teaches that backlights with a brighter central area are conventional. One of ordinary skill in the art would have recognized that you can make the central

area brighter by positioning lamps closer together in the central area as taught by Oigwara.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie A. Shallenberger whose telephone number is (571)272-7131. The examiner can normally be reached on Monday - Friday 830-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on 571-272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAS
AU 2885

/Jong-Suk (James) Lee/

Supervisory Patent Examiner, Art Unit 2885